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Illegal Diversification Strategies in the Farming Community from a UK perspective

Abstract

Illegal diversification strategies in farming contexts are neglected in research terms. There are endogenous and exogenous factors that influence the potential strategic capability and activity of illegal entrepreneurs and criminal farmers. Internal factors include the personal characteristics of the farmer—qualities and skills. External factors, outside the control of the individual illegal entrepreneur, include the activities and processes undertaken by them, the characteristics of the illegal enterprise, government policies, markets and environmental factors. Using a documentary research methodology of 210 case studies, located on the internet, from across the UK (where farmers had been charged with criminal offences relating to their occupation) The article contributes to the literature on farm diversification and rural crime.

Key Words

Criminal Entrepreneurship; Illegal Farm Diversification; Rogue Farmers; Rural Entrepreneurs; Farm Entrepreneurs; Farm Strategies.

1. Introduction

We focus on ‘Illegal’ and ‘Criminal Entrepreneurship’ in a rural context as a neglected rural geography (Philo, 1992). The literature on illegal entrepreneurship in relation to strategic planning or illegal finance, in particular, is sparse as evidenced by the lack of coverage and tendency to focus on corruption rather than the individual entrepreneur (See Bouman, 1990/2008; Smith and McElwee, 2013; Smith and McElwee, 2015). Indeed, Bouman (2008) defines informal finance as being ‘identified with a money market dominated by the unscrupulous. Yet, Illegal or Criminal Entrepreneurship as defined by Baumol (1990) is a reality in every type of economy including the rural. Thus, entrepreneurship can be productive, unproductive and even destructive (Baumol, 1990). Economic indicators from developed and developing nations suggest that such destructive entrepreneurial practices are on the increase (Smallbone, and Welter, 2010 Webb *et al*, 2009). Most governments strive to reduce illegal activities by either preventative or deterrence measures such as education and enterprise support or through punitive measures such as detection and prosecution. Many entrepreneurs also draw on illegal entrepreneurial experiences in terms of strategic decision-making (Aidis and van Praag, 2007). Nevertheless, the extent of illegal entrepreneurship can never be fully known, as gaining access to such entrepreneurs is problematic (as it is a neglected, hidden phenomenon – Philo, 1992). Even when apprehended by official processes, such entrepreneurs are unlikely to cooperate with official bodies or academics and so the darker side of strategic decision-making remains unclear. Bouman reminisces that as a lone researcher in finance in the 1970s when he first submitted a conference paper on the exploits of informal financial intermediaries, his ideas were regarded as eccentric. This resonates with us because, in researching the rogue and criminal farmer, we too have encountered resistance from individuals within the farming community and also, from farming academics and institutional gatekeepers in the farming industry. Indeed,

a general attitude of disbelief and denial permeates the industry. This extends to a view that it is not helpful to promote negative stereotypes of farmers because this may upset powerful farming interests and lead to research being frustrated and marginalized.

The contexts of this study are rurality and the food industry. There are no officially accepted statistics for food crime in the UK other than the accepted total value of the food and drinks sector – which is a £200 billion industry. UK official Crime statistics do not report on such crimes. In their strategic overview Morling and McNaughton (2016) do not provide figures but use news media and vignettes to support their strategic review.¹ They do, however, mention rogues in passing and acknowledge that there is some organized criminal activity but treat food crime as an activity perpetrated on the industry, not by some of its more unscrupulous stakeholders. However, newspaper reports and industry bodies suggest that it could be anything from £1.7 to 11 billion but there is no definitive figure.² Academics are at the forefront of investigating insider activity and there are numerous articles in press on the subject (see for example, Manning, Smith & Soon, 2016; Fassam & Dani, 2017; and Smith, 2017).

This article contributes by extending the potential and implications for the diversification and activities of rural businesses and businesses involved in the agricultural/farm supply chain to include examples of informal and criminal pluriactivity. We

¹ The report is jointly authored by Morling and McNaughton and includes evidence obtained in their roles as Heads of the National Food Crime Unit and Scottish Food crime and Incidents Unit (Food standards Agency and Food Standards Scotland. The report reflects an official reluctance to highlight insider crime shared by The National Farmers Union and other representative bodies.

² See the report in the Telegraph by journalist Lexi Finnigan on the subject - <http://www.telegraph.co.uk/news/2016/03/24/food-fraud-in-the-uk-toxic-vodka-and-pet-food-meat-given-to-huma/> and also <http://www.newfoodmagazine.com/22854/blogs/food-fraud-an-emerging-risk-for-the-food-and-drink-industry/>

are primarily interested in farmers who are dependent on the land for an income, or farmers with diversified business interests such as abattoir owners. We define farm diversification in terms of ‘livelihood’ (Hussein and Nelson, 1998). This includes on-and-off-farm activities, resources and skills, which generate extra income by creating additional agricultural or non-agricultural products, or supplement farm incomes by self-employment or paid labour (Spiller, 2015). Diversification relates to strategically systematic planned movement away from core business activities (McElwee, 2006). However, seldom are informal and criminal diversification strategies of farmers taken into account. We thus extend a previous iteration of a segmentation framework for understanding types of farm diversification (McElwee and Smith, 2012).

Successful illegal entrepreneurs utilise complementary skill sets (Smith and McElwee, 2013), which mirror legal forms of enterprise including - cooperation and networking; marketing; business and managerial skills; entrepreneurial qualities and values; as well as technical and professional skills. This means that ‘entrepreneurs’ who operate illegally have similar combinations of enterprise skills (networking, strategic awareness capability, long range planning, customer knowledge and market understanding) as legal entrepreneurs (Smith and McElwee, 2013). What differentiates them from their law-abiding peers is their attitude to risk and willingness to break laws and transgress social and ethical norms and mores.

We argue that following Baumol’s definition, illegal entrepreneurs operate in any domain in any product, in any market and in any value chain where there is an opportunity to exploit by circumnavigating legal processes (Baumol, 1990). Indeed, illegal entrepreneurs may be more entrepreneurial than legal entrepreneurs as they utilise a greater number of skills to remain in business. In this paper, we document, articulate and narrate what illegal diversification strategies used by rogue and criminal farmers

are evident from the literature and from our empirical research. This is important because of the paucity of academic literature on the subject. Our research question is therefore relatively straightforward – what are these illegal diversification strategies? We ask what should be the concerns in relation to illegal entrepreneurship - i.e. the entrepreneurial processes, the entrepreneurial venture and the entrepreneur? Secondly, why should such stakeholders be concerned about illegal entrepreneurship? And thirdly, what are the consequences for not being concerned? Farming is the industry specific setting for our enquiry. We define what we understand to be illegal entrepreneurship whilst noting and commenting on the diversity of stakeholders involved: either as entrepreneurs, colluders in the illegal entrepreneurial process, in prevention and those involved in exposing and punishing the entrepreneur. Thus, in the process of providing a conceptual framework for understanding illegal entrepreneurship populated by examples, we present an extended conceptual framework, which considers various approaches to understanding the phenomenon, and distinguish between the informal economy and illegal entrepreneurship. There is no simple continuum between what is legal and what is not. We place emphasis on the pressures for diversification and the nature of that diversification and barriers to diversification are identified and discussed. The article is structured as follows. A synthesis of the literature and empirical research is provided, followed by the methodology section and an overview of the literature relating to key themes to drive the structure and subsequent lines of argumentation. We then present our empirical evidence, which we use to make comment upon aspects of the literature. We conclude by opening a discussion of how theories of illegal entrepreneurship impact on the situation in this study.

2. A literature overview on the informal and criminal economies

The informal economy is a 'market based production of goods and services, whether legal or illegal, that escapes detection in official estimates of GDP' (Smith, 1994.18). The informal and grey economies are distinct but merge into the legal and criminal economies and that illegal enterprise is prevalent (Williams, 2010, Livingston, et al, 2014). But why, is this so? Perhaps instead of asking why illegal enterprise is prevalent a different approach would be to ask why it is not more prevalent. However, because little has been written about the informal and criminal in relation to diversification (particularly in a farming context) it is necessary to begin with an overview of what has been written in relation to the legal.

2.1. The entrepreneurial farmer and other farming stereotypes

Entrepreneurship is about economic individualism and competition (Gray, 2002 p. 61) and can be defined as “*the creation and extraction of value from an environment*” (Anderson, 1995). We appreciate that there are many types of entrepreneurs. However, we subscribe to the thesis of the entrepreneurial farmer (McElwee, 2006; and Richards and Bulkley, 2007), albeit we accept that not all small farmers are entrepreneurial, nor very competitive by nature. Nevertheless, as McElwee notes, many farmers are risk-averse despite being shrewd and calculative with money and Profit maximization in states of constant uncertainty combined with the ever-present possibility of failure, characterize farming, but many farms have limited opportunities in terms of growth orientation and limited opportunity to expand. Nevertheless, farmers are generally innovative in nature when it comes to making or saving money. Smith and McElwee (2013) discuss the types of illegal activities that generate extra income.

Farmers are not a homogenous type encompassing as it does existing bucolic stereotypes such as the ‘Gentleman-Farmer’ (Sutherland, 2012), the ‘Part-Time Farmer’, the

‘Tenant-Farmer’, the ‘Arable-Farmer’, or the ‘Hill-Farmer’ (Gasson, 1986); the ‘Good-Farmer’ (Saugeres, 2002); and the farmer as a hegemonic ‘Patriarch’ (Price and Evans, 2009). Farmers are socially constructed as hero-figure, albeit a lesser stereotype of the ‘Bad-Farmer’ (Richards and Bulkley, 2007) does exist. So why should there be a silence in the literature to the rogue or criminal farmer (Smith, 2004)?

2.2. Legal Growth Strategies open to adaption by the Entrepreneurial Farmer

It is helpful to consider legal diversification and differentiation strategies through which one can obtain sustainable competitive advantage (Aakers, 2001; Merson, 2016), because the presence, or absence, of legal avenues can influence, or determine, whether illegal strategies are an option. McElwee and Smith (2012) articulated how formal and legal income generation streams are the mainstay of any farm-based business. Rational farmers would likely choose to exhaust legal opportunities before considering illegal ones, albeit that criminal diversification strategies could appeal to some farmers who have a heritage of engaging in illegal activity via socialisation into such practices. This rational conscious choice to engage in illegal activity separates the criminal farmer from the rogue-farmer. There are several generic legal strategies that farmers and rural entrepreneurs can adopt. Table 1 based on Aakers (2001) ‘sets out’ the dimensions, which may influence the decision of an entrepreneur to engage in legal or illegal entrepreneurial practices, or not.

Table 1 here

These dimensions include moral, legalistic, economic and social dimensions (MacFarlane, 1996) and can be regarded as value adding activities, which compliment a business by boosting its financial, social and reputational capital. Legal income generating diversification strategies assume a degree of uncertainty which can be mitigated against by well-researched and realistic strategies (Shane, 2003). These improve survival rates

and profitability, and add a level of legitimacy (Hannon and Atherton, 1998). However, in illegal ventures it is unlikely that there will be a written business plan, Frith and McElwee (2007). Like legal strategies, illegal strategies change ‘according to circumstances’, Frith and McElwee, (2007.274) and are influenced by the skills and competencies of the entrepreneur and existing resources. Illegal forms of entrepreneurship may also add value in that its unintended consequences are an increase in an entrepreneurial ethos and more competition (Baumol, 1990). The informal sector contributes to the economy too (Williams and Round, 2009) and the profit from illegal enterprise may be channeled into the formal economy. Figure 1 ‘sets out’ nine possible change options/strategies, which illegal entrepreneurs may pursue at any given time.

Figure 1 here

Two options involve not engaging in illegal pluriactivity, whilst the option of doing nothing, might be considered a negative strategy it may be a good long-term survival prospect. The other strategies range from growth strategies to full-scale diversification strategies, and offer a variety of ways for illegal entrepreneurs to develop their business to consolidate existing strengths, or grasp new opportunities. Each option has its own unique challenges and barriers.

Growth by Expansion: Is the most obvious strategy (Aakers, 2001), but purchasing, or renting, additional land is not always possible, nor is borrowing money straightforward or viable. Nevertheless, for many farm entrepreneurs (McElwee, 2006), business expansion to increase returns to scale, is a good first option in pursuing strategic change. The entrepreneur must ‘weigh up’ the associated uncertainty. If the risk involved by expansion involves trading on existing competencies and resources (internal and external) then the risk is comparatively low. Nevertheless, the gains associated with employ-

ing growth strategies tend to be lower than those gained through adopting riskier strategies where potential gains (and losses) are much greater. However, gaining entry to such high value diversification opportunities can involve considerable cost as significant capital outlay is required. Moreover, profit margins in such ventures are usually small due to the high volume of turnover and low profit margins. Growth is not then the most obvious change strategy and many entrepreneurs elect to pursue other potentially more rewarding change strategies. In farming, the legal opportunities to expand are constrained and financially costly making expansion difficult. This can make illegal strategies more appealing.

Different Use of Capacity by Specialisation: Maximising product range is a sound strategy, but there is a big difference between being a price taker, and not a price maker (Aakers, 2001). Sometimes diversification is about maintaining market place, or surviving. To counter this, entrepreneurs may use their existing resources differently, engaging in specialised activities. Increased specialisation enables legal, and illegal, Smith and McElwee (2013) businesses to augment their existing competencies by focusing exclusively on a narrow market offering. Increased specialisation carries with it notable risks. Many entrepreneurs diversify product range to help minimise other risks. Again, specialisation for farmers is a risky proposition because good husbandry dictates spreading activities and risks. The extant literature is silent on using specialisation and rural social capital (Hofferth and Iceland, 1998) in illegal settings.

Growth by Expansion of Production: A viable means of specialisation available to owners/managers is to move away from a specialised activity with little market share and concentrate on expanding production (Aakers, 2001). However, in farming with quota restrictions this is not always an option because of land shortage, or distance from

markets (Aakers, 2001). This is only a viable strategy in illegal settings if parallel production and supply-chains can be operationalised covertly.

Enlarge Capacity by Vertical Integration: This is a common strategy in legal entrepreneurial practice (see Aakers, 2001). For Aakers, Changes in strategic direction often occur due to pressure from customers to reduce product prices, thus endangering the long-term survival prospects of the business. Thus, entrepreneurs must ‘claw back’ control of their business to regain decision-making powers wrested away from them. In farming, vertical integration is not always a viable option. Nor can one legitimately vertically integrate illegal and legal value chains. This makes this strategy non-viable.

Co-operation with Other entrepreneurs: Cooperation and strategic positioning (Aakers, 2001) as opposed to growth strategies that involve acquiring/leveraging internal resources, many entrepreneurs choose to engage in joint ventures with other entrepreneurs, to improve economies of scale and scope to combine resources to engage beyond their individual means. Cooperation secures benefits associated with large scale activities, whilst minimising the risks of ‘going alone’ but entails relinquishment of a degree of autonomy that many owners take for granted. Such opportunities are rare in farming. In illegal enterprise, this is a very viable strategy because existing networks can be implemented for both legal, and illegal, activity.

Diversification into a different Business: In response to falling profit margins associated with traditional business forms, entrepreneurs can use existing resources, or release capital tied up in land-ownership to pursue different forms of business activity entirely (Aakers, 2001). One can enter the property market by selling off land, or out-buildings, to outside construction companies but this is a one-off diversification (selling

the family silver). Renting is an option and the property may be used for legal, or illegal ventures. This is a more viable strategy for farmers. Nevertheless, such practices like selling off land or property tend to be one off transactions.

There are many barriers to strategic change which obstruct, or restrain, strategic change plans and range from opportunity discovery, individual differences in decisions to exploit, psychological or environmental contexts of entrepreneurship, or resource acquisition issues. The biggest barrier to farmers is location and proximity to markets (McElwee, 20016) e.g. farm shops are not viable in remote areas where there is not a customer footfall. Thus '*Off-the-books*' (Williams, 2010) and illegal entrepreneurial opportunities can be appealing to farmers.

Table 2 presents change strategies which influence an entrepreneurs', decision making processes to diversify irrespective of the legality of the diversification opportunity.

Table 2 here

Formal, or informal, planning is necessary in achieving strategic change but in farming circles much diversification is 'script based' being passed on in conversation between farmers. In criminal ventures, such knowledge is also usually script based too (and thus deniable). Potential business strategies are numerous, but can be classified within three broad groups, namely:-

1. Competition via quality, or price (Porter, 1985).
2. Product and service innovation (Storey, 1994).
3. Market Niche Domination (Birley and Westhead, 1990).

Each strategy outlined above represents a *potential* avenue for business development, and growth, and the adoption of specific skills, competencies and resource sets. Illegal entrepreneurial ventures can usually undercut the prices charged by legal ventures, and thus provide an edge to criminal entrepreneurs. Such individuals, therefore do not have

to rely on innovations, nor concern themselves with domination. Yet, exogenous factors will influence which of the strategies are most likely to be pursued. For example, in farming, farmers have very little control on competition paradigms or price setting. There is little scope for product or service innovation, and market niche domination is the province of a few rich farmers, or agricultural corporations, making small scale pluriactivity, diversification and segmentation opportunities more appealing. Unfortunately, these are not always legal opportunities (Smith and McElwee, 2013; Somerville, Smith. McElwee, 2015).

2.3. Pluriactivity, diversification and segmentation

The literature on farm diversification is protean. There is a generic literature on segmentation but there is a knowledge gap between theory and strategy implementation (Jenkins and McDonald, 1997). Few studies relate to the small business, agricultural and farm based sectors and few of these directly relate to segmentation frameworks, or diversification (McElwee and Smith, 2012). Pluriactivity and generating multiple income streams are recognised strategies in farming (Carter, 1998). There is a small body of work in relation to illegal segmentation or diversification in farming particularly on the ‘strategic awareness capability’ of farmers (McElwee and Smith, 2012), ‘pluriactivity’ (McInerney *et al*, 1989) and on rural and farm based diversification strategies (Gasson, 1988; Ilbery, 1991; McNally, 2001; Meert *et al* 2005; Atterton and Affleck, 2010; and McElwee and Smith, 2012). This is focused on marginal farms (Meert *et al* (2005), and survivalist strategies (Niemelä, and Häkkinen, 2014). For these, authors, diversification is a key driver in farm and rural business scenarios in improving economic viability. It requires different skills and skill sets (including illegal diversification activities). The extended segmentation framework (McElwee, 2006) will outline these additional skills. Criminal diversification is a high-risk specialisation strategy, (McElwee,

et al, 2017) as criminal strategies face similar constraints, pressures and barriers placed on farmers as those encountered in legal diversification strategies.

2.4. Expanding the segmentation framework for classifying farm diversification

In this article, we build upon generic strategic frameworks available to small businesses (Porter, 1980; and specifically, McElwee and Smith, 2012) to enable a more nuanced understanding of entrepreneurial, and business, attitudes in the agricultural sector. These include: entrepreneurial skills, capabilities, personal mastery, transformational leadership, shared vision, absorptive capability, teamwork and organisational performance necessary for entrepreneurial growth (McElwee and Smith, 2012). The informal, and criminal, diversification strategies discussed herein are dynamic, entrepreneurial capabilities (Teece, et al 1998; Winter, 2003) which can engender competitive advantage, or survival. Informal, and criminal, diversification strategies are cynical forms of strategic entrepreneurship (Eisenhardt and Schoonhoven, 1996).

There has been relatively little research that attempts to systematically segment the illegal sector. The personality of the farmer, and their propensity towards engaging in illicit behaviour is important. Farmers like other social actors have differing moralistic frames of reference. The possession of entrepreneurial alertness (Kirzner, 1979) for example, need not exclude a propensity towards making money using illegal methods. If an informal, or criminal, opportunity offers a more viable outcome than legitimate approaches, then the character, personality and circumstances of the individual farmer will determine whether to engage with the informal, or illegal, solution activities. Where strategic awareness meets with criminal temptation, then there is no predictable measure of the outcome. However, entrepreneurial behaviour and intention is not al-

ways stable (Shane and Venkataraman, 2000) thus frameworks must be capable of encompassing, informal, and illegal actions. We turn now to consider methodological issues.

3. On Methodology and documenting illegal pluriactivity

In framing this study to tell our stories of roguery (Tönnies, 1926), we combine systematic literature review methodology, which takes cognizance of sources that inform research syntheses – talk, observations and documents (see Onwuegbuzie, Leech and Collins, 2012) with documentary research (Scott, 1991, 2014); and internet mediated research [IMR] techniques (Jones, 1998; Hewson, Yule, Laurent and Vogel, 2003). We do so in a focused, purposeful way as a form of ethical, ‘Netnography’ (Kozinets, 2015) because we concentrate on the data, and the crime type, and not the named individual. We simultaneously, adopt a sociologically inspired, narrative perspective, emphasizing quantitative elements (Franzosi, 1998, 2010, 2014).³ We focus on narrative as a form of socio-historical data (Franzosi, 1998a and b) because our data is derived from events occurring over an extended period.

3.1. Data collection

³ Individually, such sources are often called into question but collectively they inform evidence-based practice. A convincing literature review has the aesthetic qualities of a well written novel. An evidence-based review comprehensively covers the field to reach the best intervention (Adolphus, no date) summarizing and critiquing the literature to improve research practice and understanding of research methods.

The development of the previous iterations of the segmentation framework relied on questionnaire and survey methodology to gather data through standardized questions to elicit the required information to build the framework. However, as Gambetta (2000) argues, criminals communicate differently (in a more guarded manner) to others because they rely on maintaining secrecy from the authorities. We simply could not email, or post, a survey to rogue or criminal farmers. Firstly, as there was no extant database, we created our own excel spreadsheet. And secondly, as Gambetta suggests, as a norm active successful criminals are unlikely to cooperate with academics. To counter this, our methodological framework is based upon documentary research methodology (Scott, 1991/2014). We made a search of newspapers/internet via LexisNexis® using keywords to identify cases where farmers had engaged in farm-based criminality. The articles returned were mainly from UK and Irish newspapers and other media outlets. Others were from internet sources. To be included in our data sample/data base the published examples had to provide the names and addresses of the individual farmers being discussed for verification and corroboration purposes. In addition, we searched for other articles on the crime/event to further corroborate that the crimes were reported in the public domain. This fits in with the ethical guidelines of Jones (1998), and Kozinets (2015) in conducting IMR. We treated the individuals named in the internet articles as anonymized, virtual subjects (Smith and Leigh, 1997). In creating these anonymous narratives, we took care to utilise qualitative analysis techniques (Miles & Huberman, 1994) to ensure that the themes which emerged were replicable and based on the media narratives. This process avoided the main ethical dilemmas of obtaining informed consent, debriefing, the public–private domain distinction, and confidentiality (Hewson, 2003). The point here is that these are real stories gathered from press and media reports (part anecdotal, and part biographical) and that collectively from an analytic sociological context they constitute both qualitative and quantitative data

(Franzosi, 2010, 2014). We were aided in this by having used the same basic methodology to author a series of ‘nested’ case studies (Smith, 2004; Smith, 2011; Smith & Whiting, 2013; Smith & McElwee, 2013; Smith and McElwee, 2014; Somerville, Smith & McElwee, 2015). This assisted in the creation of the excel spreadsheet of 210 cases from across the UK in which farmers had been charged with criminal offences relating to their occupation of farming. A limitation of the methodology is that we were reliant on the information published by journalists and in some cases unable to compare data.

Our basic unit of analysis is the entrepreneur, because it is the actions of the entrepreneur that make them either legal, or illegal; alternative units of analysis are the enterprise and offence committed. Illegal entrepreneurs cannot be isolated from the business and environmental phenomena which impact upon them and, also, reaching agreement on how to define an illegal entrepreneur is problematic.⁴ However, as a proxy, it is the crimes committed by the individuals we focus on completing the cycle of anecdote, data, typology and theory. In this article, we are interested in what the underlying quantitative narrative tells us.

4. Discussion and analysis

Based on our readings and collective knowledge distilled from our empirical research, we constructed an excel spreadsheet of 210 rogue and criminal farmers. Of the 2010 rogue-farmers, only three were female. This is not a gender based finding because it mirrors the organisational practices of farming in which the male head of the household

⁴ Previous iterations of the segmentation framework did not include characteristics such as the entrepreneurs’ personality, character and moral outlook. This may be because personality, character and morality are not easy questions to answer and often have to be assessed by others. They are not yes/no answers. Qualitative phenomena such as personal characteristics, ‘entrepreneurial alertness’ and ‘motivation’ to diversify, involve psychological underpinnings such as ‘perception’ and ‘cognition’ and the personal beliefs/value systems on the part of the actors involved; as such they are complex phenomena to investigate.

is designated as farmer. Table 3 provides a breakdown of the type of crimes and offences encountered in the farming community. From this database, we identified typical crime types.

Table 3 here

We then sub-divided the sample into five categories of activity – Informal (On Farm); Environmental (On Farm); White-Collar (On Farm); Criminal (On Farm); and Criminal (Off Farm). What is interesting is that the type of crimes engaged in by criminal farmers are extensions of their everyday working knowledge as farmers and their rural social capitals (Hofferth & Iceland, 1998). Most are low entry and do not entail accessing large sums of money. The activities either provided additional income or saved money.

Table 3 evidences the relevance and frequency of the crimes. The type of data collected is discussed in context and we present (anonymized) illustrative examples from cases cited in the table. The types of criminal activities encountered in the data were statistically more likely to be of the ‘on farm’ variety, rather than being ‘off farm’. An explanation for this may be that, farms are considered to be private land, to which the public and authorities do not have ready access. The public generally respect such issues of privacy. This makes any illegal activity occurring on such land easier to perpetrate, because of the absence of public gaze.

When taking cognizance of the informal/cash in hand category, we are considering ‘off the books’ transactions, which parallel legal business transactions and use industry based skill sets. The main proviso here is that such activities are kept secret and not declared to the tax authorities. Deniability is a key factor in play here, and there is no explicit acceptance of wrong doing acknowledged.

When considering the environmental crime category, it must be stressed that such offences are usually driven by money saving strategies or caused by pressures directly related to work issues. Such practices are usually considered to be acceptable farming practices or folk crimes which bear no stigma. There is no implicit acceptance of wrong doing.

Thus, collectively, offences such as tax evasion and avoidance; using red diesel; avoiding vehicle excise or insurance documentation are considered to be acceptable cost saving strategies. Similarly, minor insurance frauds (inflating genuine losses) and ghosting vehicles are also seen as being acceptable sharp practice as sometimes vehicles only cross public roads to gain access to other land. Even using illegal food additives and veterinary medicines are considered acceptable operating practices. Many farmers teach themselves to carry out minor veterinary procedures. In this respect, a degree of cruelty to animals is sanctioned, to avoid paying vet bills. Engaging in other diversification strategies such as a puppy farm, are also considered as acceptable practice. Again, secrecy and deniability are key factors in play and the excuse of 'I am just a farmer' are often used. In this category farmers excuse their actions as being minor misdemeanors.

When considering the category of 'on farm' criminal activity, there can be no doubt in the farmer's minds that they are engaging in criminality. Therefore, allowing a farm business to be used for money laundering or the disposal of chemicals and waste, is clearly illegal, similarly knowingly allowing criminals to store drugs and stolen property, or use rented premises for drug production. Here the farmer is crossing the line of deniability. It is therefore difficult to argue that such income generating activities are acceptable. When considering theft, such as stealing livestock or related farm products or resetting same, there can be no excuse. Theft is theft. However, engaging in

other illegal diversification strategies such as dog fighting and hen fighting and illegal slaughtering practices, whilst criminal, are often tolerated within certain parts of the farming community. Such practices, although illegal, are seen as partially acceptable. However, selling fertilizers to non-farm clients, and engaging in major fraudulent or corrupt schemes, are inexcusable. Engaging in criminality, and vendettas through malice against other farmers, is a criminal, not business strategy. Similarly, engaging in illegal migrant labour, and using slaves, is also an obvious criminal strategy.

The last category of ‘off farm’ criminal activity is palpably a criminal strategy as farmers know that their actions are criminal. In this crime type, it is criminal social capital that is being cultivated, not rural or entrepreneurial social capital. Such crimes are not condoned by the legitimate farming community.

The instances of these serious crimes are not so prevalent in the data, but it must be remembered that the database was built using media accounts which relate to a focus on a single, or particular crime. As a consequence, such media accounts rarely provide details of previous wrongdoing and it would be necessary to properly profile the accused, using the criminal records database, to establish if there is a pattern to the crime types engaged in by rogue and criminal farmers. Access to such a database is beyond the scope of the academic research and would require a study sanctioned by the authorities. There is however, limited evidence that some farmers repeatedly engage in more than one crime type during the course of their illegal business practices. See McElwee (2008) and Smith and McElwee (2013) for an example of such activities.

From an analysis of the underlying narrative we suggest that a plausible explanation for such strategic criminal behaviour is that of ‘*Farmers Mentality* (see Smith and Duncan, 2014) which is engaged in on a routine basis.

Farmers Mentality

Is an ingrained, cultural and occupational mentality, or way of thinking. It results from a seasonal ‘man-versus-nature’ condition associated with the occupation because farmers constantly battle against nature, the weather and opposing, oppressive market forces. Farmers endure periods of disruptive operational occurrences and remain optimistic and resilient in the face of natural and man-made crisis. He, or she, often face catastrophic events and the sheer unpredictability of the occupation (cycles of boom-and-bust). In terms of entrepreneurship theory, they endure the ‘gales’ of creative destruction (Schumpeter, 1942) as well as destructive creation caused by corporate agri-enterprises. Farmers author their own legend and narrative.⁵ The farmer is an innovator, risk-taker and must engage in proactivity or brinksmanship. Above all, the stereotypical ‘good-farmer’ must be seen to be fair but over time they develop an ‘occupational nous’ or mentality. This is a particular, collective, state of mind, an attitude, and bounded rationality.

In farming, there is not the same sense of competition versus competitors as there is in other industries. The ‘good-farmer’ plays fair (or at least be seen to do so within their communities). Good husbandry, thrift and not spending are part of the stereotype of this mentality (See Smith and Duncan, 2014). It is related to financial shrewdness and thrift and parsimony. Negative perceptions of farmers suggest that they are mean, calculative and crafty as well as possessing legendary negotiating and money-making skills linked to market mechanisms and policy logics. Farmers are averse to waste,

⁵ We see two opposing stories or story types – that of ‘*narratives of craft*’ or ‘*crafty narratives*’. Narratives of craft are good stories which educate and inspire future generations of farming stock. However, crafty tales are stories of greed and guile where the crafty farmer gets one over on peers or society. Crafty tales are also intended to act as a form of cautionary tale. A common theme in such stories is of farmers being willing to spend thousands on a tractor but not buy a byre brush or barrow when it is no longer functional. We are indebted to the work of Anne Smith (Smith and Duncan, 2014) in relation to our understanding of this storied nature of the concept.

wasting and wasters too and recycle most things and dislike wasting money. This is in turn linked to their everyday work practices and to social intelligence. Farmer's mentality is a form of institutionalised coping mechanism. Glover (2014) speaks of charismatic farmers generating creative solutions to everyday problems and engaging in creative thinking as well as imagined futures. It is related to everyday working practices on the farm for example as a '*Fix-it-Yourself*' problem solving strategy. It is a strategic and tactical behavioural mechanism. However, within the farming community there is an unwritten rule that farmers must respect each other thus rule violations are marked by penalties such as offending farmers being ostracized or other penalty being imposed. It thus relates to a general sense of 'well-being' – psychological, physiological and physical and of survival and surviving crisis.

Farmers' mentality is not a planned strategic intervention such as Ajzen's theory of planned behaviour (Ajzen, 1991) being more of an emergent behaviour.⁶ Nevertheless, there is a cynical, darker side to farmers' mentality in that the same forces of socialisation which make it a 'force-for-good' can make it a 'force-for-bad' too because rather than waste a commodity they may be tempted to sell it on to defray costs. This can create repeat custom and a mutual obligation on regular customers and the cash-in-hand income generated can become quite lucrative. This example is a case of informal entrepreneurship (Williams and Round, 2009) in action which creates and extracts value from the environment (Anderson, 1995) similarly to how a legal entrepreneurial transaction would do. Thus, the informal crimes and environmental crimes presented in table

⁶ Ajzen argued that intentions to perform behaviors of different kinds can be predicted with high accuracy from attitudes toward the behavior, subjective norms, and perceived behavioral control. These intentions, together with perceptions of behavioral control, account for considerable variance in actual behavior. Attitudes, subjective norms, and perceived behavioral control are shown to be related to appropriate sets of salient behavioral, normative, and control beliefs about the behavior, but the exact nature of these relations is still uncertain. As a result, expectancy-value formulations are found to be only partly successful in dealing with these relations. Ajzen argued that the inclusion of past behaviour in the prediction equation provides a means of testing the theory's sufficiency.

3 permit the farmer to engage in neutralization techniques because the actions are not viewed as crimes *per se* by the farming community. So-called white-collar crimes are often seen as excusable by the perpetrators as being industry specific offences – one is cheating the state not individuals and thus the stigma is neutralized – however, this is far from the case. There is always a victim. The real crimes are also of a hidden nature being committed on private land and it is common for farmers to plead that they were the victims of circumstance. In table 3, column 1 – 4 the activities are often an expansion of the legal business conducted for economic gain, using additional capacity. They exemplify an illegal form of integration. Often the activities require knowledge of other illegal entrepreneurs and cooperation against the authorities. In column 5 the activity is in a different illegal business domain.

Our adapted segmentation framework expands and develops our understanding of what these entrepreneurial skills are. This analysis bridges the gap in our understanding between legal core skills and illegal skills farmers. Whilst skills can be generic – it is the activities which may or may not be illegal. This framework offers a comprehensive mechanism for analysis of the farming sector by expanding existing typologies to include the criminal. Informal and criminal diversification strategies adopted by the farmers in this study are not dependent on traditional management skills (Bolton, 1971; Storey, 1994; Gray, 1998) but upon the criminal adaption of core industry specific skills, knowledge and rural social capital (Hofferth and Iceland, 1998). This is important because some farmers are weak in traditional entrepreneurial skills, particularly business and management skills (McElwee and Annibal, 2010).

It is apparent that their diversification opportunities do not require access to traditional entrepreneurial or small business resources but to alternative markets where they can exercise their farming knowledge. These illegal strategies lean towards survival or

subsistence and diversifying into profitable alternative income streams to obtain sustainable un-declarable flows of ‘hard cash’ and help maintain existing lifestyles (Gray, 1998), or hedonistic indulgences. The need for farmers to engage in more pluriactivity and diversification strategies is driven by the current economic climate which has placed huge pressures on the EU farming industry overall (McElwee and Smith, 2012) exacerbated by other socio-political factors which force farmers to retire or lose tenancies. Thus, informal, and criminal, diversification strategies are perhaps appealing because they do not as a general rule necessitate generating alternative income from non-agricultural sources but are an extension of farm based knowledge. The entrepreneur usually possesses the land, the skill sets and the networked contacts to be able to operate effectively placing further restrictive barriers on what types of activities one can diversify into (McElwee and Smith, 2012). This does not apply to informal or criminal diversification activities.

This section highlights the barriers and broadens the discussion to general attitudes towards entrepreneurialism to include the informal and the criminal. We add to specific potential barriers to diversification, identified by McElwee (2004).⁷ The financial landscape of farming has changed in the recession which is important because although in the past farmers may not have needed to raise capital from sources external to the family network this is no longer true. Whilst the family must remain the main source of risk and venture capital for most farmers (Casson, 1982) in terms of capital, labour and information there is a potential dark side to raising finance even in farming. Competitive advantage can be gained even by criminal means. We have thus addressed some societal nuances of farming family life. We must guard against criminal capital and criminal incentives being invested or laundered in farms and supporting businesses.

⁷ These include poor management skills of farmers; Lack of entrepreneurial spirit; Limited access to business support; Farm tenancy agreements and Regulation.

Yet, we wonder what the true scale of informal and illegal venturing is in the farming community. It is perhaps time to have that debate?

The same socio-economic forces which drive legal diversification, drive the illegal. Indeed, it will most likely be a reduction in, or loss, of income from a legal opportunity that triggers the engagement in illegal opportunities. Often, the only decision will be whether to engage in legal diversification versus illegal, specialisation. Smaller (and particularly marginal) farm units are vulnerable to economic pressures as many small farms make a loss. The combined impact of current low and negative incomes on owner equity in some sectors, and especially for tenant farmers, is potentially critical for substantial numbers of businesses and families (McElwee and Smith, 2012) are likely to trigger the uptake of illegal diversification activities. This leads to uncertainty within these businesses and families and to temptation. Therefore, the opportunities of diversification are a significant issue for farmers including informal, and criminal, solutions. Additional sources of farm-based income need not be restricted to the legal and to agricultural diversification. Opportunities to engage in legal diversification are dependent on a range of variables: the geographical location of the farm, the topography of the land, the economic infrastructure of the region, and the entrepreneurial propensity of the farmer (See McElwee and Smith, 2012). However, all opportunities for diversification need not be legal. As demonstrated, there are informal, illicit, or illegal “*off-the-books*” type diversification strategies available to desperate farmers. Farmers are not immune to behaving criminally, or engaging in ‘Illicit Rural Enterprise’ [IRE] (Smith and McElwee, 2013)., Diversification activities then, tend to be developed and staffed by family members. Conversely, criminal diversification opportunities may necessitate involving outsiders.

The need to guard against the potential for a creeping criminalization of the industry is relevant because as more small farms and enterprises pass from family owned control

to institutional and corporate control the present form and structure of farming in Europe will inevitably change. Family owned farms are the norm in the UK (McElwee and Robson, 2005) and a change to other forms may see a rise in strategic entrepreneurial orientation or architecture.

There are few experts or consultants capable of providing an 'Enterprise Architecture' (Rohloff, 2005) to mitigate against involvement. The subject is seldom discussed by farmers who have experienced informal and criminal diversification into new business ventures. Whereas conventional diversification farming strategies tend to be reactive (McElwee and Smith, 2012) farmers who participate in informal, and criminal, diversification activities/strategies towards diversification are more proactive which counters the findings of Aloulou and Fayolle (2005) in their study of entrepreneurial orientation in small business contexts. Informal, and criminal, diversification strategies are primarily engaged in by male farmers, not females. Bock (2004) and McElwee and Smith (2012) find that traditional legal farm diversification is the province of the female partners and constitute activities, traditionally been associated with the role of the woman on the farm e.g. Farm accommodation, or a Farm shop.

5. Conclusions

To conclude, this article makes a fresh contribution, by discussing common types of crime encountered in contemporary illegal business practices in the farming and food industries. As such it takes extant knowledge further along the theoretical continuum than the discussion and analysis of individual cases. It is of relevance that the crimes committed by rogue and criminal farmers (Smith, 2004) are mainly economically driven either to raise additional income or to save spending money. This fits into the darker side of 'farmers-mentality' (Smith & Duncan, 2014). It is also relevant that in

the cases encountered by the authors very few of the accused farmers were branded as criminal by the press. Furthermore, this article is helpful to scholars of rural entrepreneurship because it provides a very practical addition to the literature, by extending the segmentation framework and by considering ‘Farmers Mentality’. It is also helpful to food scientists, business school scholars and criminologists because the knowledge base and conversation is multidisciplinary. The extended framework should be useful to the authorities and investigators as an “iterative device” which can be used as a predictive strategic tool. It is also timely given the publication of the food industry report by Morling and McNaughton, 2016). In this respect, it will also be useful from a practitioner perspective. The academic knowledge gained from such studies could be used to design investigative training packages for farm and food industry stakeholders. We have illustrated how complex illegal diversification and pluriactivity strategies are in the agricultural sector. It further proves that farming is not a homogeneous sector (McElwee, 2006) but one which operates in a complex and multi-faceted environment. This article, generates more questions and consternation than it has answered. Its thesis obviously requires further research projects in the field to develop and further articulate the key arguments and map the barriers and opportunities which face farmers tempted to engage in criminal actions and networks. The study has illustrated that in the agricultural sector entrepreneurial skills and skill-sets include those associated with the informal and criminal economies. There is a pressing need for funded interdisciplinary studies and collaborations with Government Agencies to establish how widespread such informal and illegal business practices are.

Historically the motivators for farmers have not been overtly financial (McElwee and Smith, 2012). Thus, strategic decisions to engage in informal, and criminal, acts for financial gain may well be motivated by survival and subsistence instincts and by the austerity issues facing the farming and food industries, rather than profit

maximization and greed. CAP subsidies have created a dependency culture in farming and perhaps and this study demonstrates that a small cadre of farmers are prepared to adopt quite ruthless illegal diversification strategies rather than submit to market forces. The primary motivator for many farmers who adopt legal diversification strategies is that of business and personal survival and criminal diversification offers an alternative route for some farmers prepared to adopt a more strategic approach to entrepreneurship. It is possible that these issues will be exacerbated by Brexit as EU loans and subsidies become unavailable to farmers and food industry stakeholders; and by the subsequent changes of legislation required in the UK.

The data and examples in respect of the informal and criminal strategies can be compared against examples and categories from previous studies but we acknowledge that there are still missing variables which influence the framework. We further acknowledge, that we have only begun to understand the informal, and criminal, practices conducted in the farming industry. However, the possibility of using the framework as a predictive analytic tool is very real despite difficulties of presentation and interpretation.

This study further develops the classification to include criminal characteristics of diversification. Criminal diversification is part of the '*enterprise architecture*' (Rohloff, 2005) within the agricultural and farm based business sector. These add to our understanding of the entrepreneurial nature of farmers. Clearly, some farmers utilise legal, informal and criminal diversification strategies to survive. This suggests a dual form of strategic awareness and the capacity and capability to develop.

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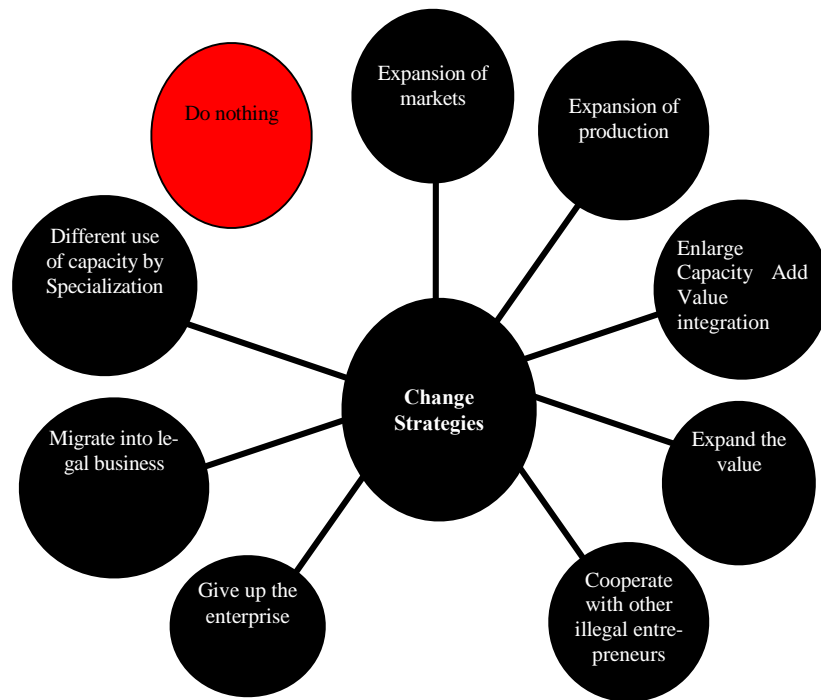
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Figures & Tables

Figure 1– Change Strategies for Illegal Entrepreneurs



Source: McElwee, G. (2006:188).

Table 1 – Dimensions influencing the decision to engage in illegal entrepreneurial practices

Moral	Legalistic	Economic	Social
Shift in Moral virtues Community belief Tax Morale Personal Perceptions Lure of certain profit Farmer's mentality Corruption Direct pressure from Criminals / Organized Crime.	Higher Business Rates Regulation of the official Economy Trade Barriers Labour restrictions	Increased Taxation Higher VAT Working Time Directives Threat of Bankruptcy Threat of Foreclosure Diminishing returns Delayed payments from Govt. schemes.	Unemployment Early Retirement Peer Pressure Fear of Failure Owing a favour Local custom / repute

Source: Author generated.

Table 2 – Change factors influencing decision to engage in diversification / pluriactivity

Strategic Change	Opportunity Discovery	Individual Differences	Psychological Differences	Environmental Context	Resource Acquisition
Growth by expansion	Knowledge of how to serve markets	Opportunity Cost	Need for achievement	The economic environment / Wealth	Due diligence
Different use of capacity by specialisation	Life experiences	Functional experience	Risk taking	Support availability	Specialisation
Growth by expansion of production	Access to information	Industry experience	Intuition	The socio-cultural environment	Opportunity attributes
Enlarge capacity by vertical integration	Knowledge about markets	General business experience	Desire for independence	Capital availability	Information asymmetry
Cooperation with other illegal entrepreneurs	Social ties	Social position/status	Agreeableness	Individualist / Collectivist	Syndication / Social ties
Diversification	Information search	Married/working spouse	Self-efficacy / overconfidence	Capital availability / Property rights	Excessive risk taking
Different business	Creativity	Education/Start-up experience	Extroversion	Freedom	Uncertainty

Source: Author generated.

Table 3– Types of illegal diversification and criminal pluricativities.

INFORMAL (ON FARM)	ENVIRONMENTAL (ON FARM)	WHITE-COLLAR (ON FARM)	CRIMINAL (ON FARM)	CRIMINAL (OFF FARM)
Cash in Hand Transactions. These mainly infringe the morality/immorality dimension in relation to diversification. There is an obvious economic dimension and there could be grey areas. There may be a social dimension re Raves and Festivals.	Money Saving Strategies'. The most obvious dimension here is economic and personal gain. The acts are all illegal. There may be a social dimension to folk crimes.	Money Saving + Income Generating Strategies. Again, the economic dimension predominates and the acts are committed in the knowledge that they are illegal or at least an offence.	Income Generating Strategies. This category sees an escalation in that all activities have a criminal and economic dimension.	Income Generating and Reputational Strategies. This category is another escalation in that all activities have a criminal and economic dimension not connected to the legal dimension of the farm/business.
Supply Meat direct to local Butchers & Restaurateurs. Sub-contract labour to other criminal farmers. Rent Property to third party on a 'No Questions Asked Basis'	Knowingly or recklessly pollute water courses with slurry or effluent Treat Animals cruelly to avoid spending money Shoot or poison wildlife affecting livelihood. Setting illegal traps.	Tax Evasion Use of Red Diesel Run vehicles without excise / Insurance. Minor insurance Frauds by falsely reporting (or over estimating) the theft of livestock and equipment.	Allow business to be used for money laundering. Accept money for disposal of hazardous chemicals or waste. Accepting money to harbour known criminals or to store firearms etc.	Knowingly invest money in criminal businesses for high return on interest. E.g. Drugs deals. Receive direct payment for criminal action such as drug running or smuggling of contraband cigarettes.

<p>Rent Fields for potentially Illegal Raves and Music Festivals</p> <p>Rent Property or accept money for long term or short term storage of items on a 'No Questions asked basis'.</p>	<p>Committing animal transportation offences.</p> <p>SEPA offences.</p> <p>Reckless disposal of carcasses or not disposing of same.</p> <p>Folk-crimes such as poaching on neighbours land.</p> <p>Folk-crimes such as Illegal brewing / stills</p>	<p>Ghosting vehicles in a larger fleet.</p> <p>Purchasing illegal Veterinary Medicines.</p> <p>Knowingly breaching cruelty to Animals offences.</p> <p>Engaging in 'Puppy Farming' and the trade in other Pets.</p>	<p>Steal livestock (cattle sheep rustling).</p> <p>Reset or Fence stolen livestock.</p> <p>Accept money for laundering stolen livestock on farm until slaughter.</p> <p>Theft of plant and equipment from other farmers.</p> <p>Knowingly receiving or resetting stolen property.</p> <p>Renting out buildings / engaging with Dog Fighting / Hen Fighting.</p> <p>Using illegal steroids or food additives in animal feed.</p> <p>Knowingly renting buildings to organized criminals and charging higher than average rents.</p>	<p>Supplying firearms to criminals.</p> <p>Malfeasance in public office – e.g. use information obtained as a local councilor for private gain.</p>
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			<p>Accepting cash for information about neighbours to criminals. Being paid for information received.</p> <p>Engaging in Halal Meat Fraud or other food fraud crimes.</p> <p>MDA offences – Cannabis farming or Meth Labs.</p> <p>Sell fertilizers to Crime gangs / terrorists.</p> <p>Use outbuildings for prostitution.</p> <p>Paying Organized criminals to enforce debts with other farmers / suppliers.</p> <p>Engage in CPA / Frauds.</p> <p>Engage in Bribery / corruption.</p> <p>Engage in cross border subsidy frauds.</p>	
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			<p>Use business such as tractor valeting as cover for dealing drugs to other farmers.</p> <p>Engage in vendetta against other farmers – fire-raising / vandalism / theft.</p> <p>Employing illegal immigrants as slave labour.</p> <p>Gang master crimes / conspiring with gang masters.</p> <p>Modern slavery.</p>	
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Source: Author generated.